



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

THE NATURE OF THE LEPROSY OF THE BIBLE.

FROM A MEDICAL AND BIBLICAL POINT OF VIEW.

By JAY F. SCHAMBERG, A.B., M.D.,
Philadelphia, Pa.

THE nature of the leprosy described in the thirteenth chapter of the book of Leviticus has been the subject of considerable research on the part of medical and biblical scholars.

That there should exist today diversity of opinion upon the nature of this disease is not surprising, when the difficulties attending the translation of the biblical text are properly understood.

During the past four thousand years the Hebrew language has been undergoing the evolutionary changes to which all languages are subject. There can be no doubt that the meanings of some words have been so modified that their primitive signification has been entirely lost. It is a philologic axiom that the older a language becomes, the more do the words draw away from their etymologic progenitors. And so translators of the Bible have been confronted with the difficult task of translating certain Hebrew words, the exact meanings of which had been lost during the march of centuries. These words, which conveyed definite and specific ideas to the writers of the Bible, have been translated only with the aid of the etymologic key. Such translations, while approximate, are often sufficiently inexact to lead to grave error. Medical terms, such as are used in the description of leprosy, have been particularly difficult of translation. This may account for some of the incongruities in the translated text.

In discussing the nature of the *lepra hebræorum*, the question which naturally presents itself for solution is: "Was the lepra of the Bible identical with our modern leprosy or lepra?" Let

us institute a comparison between the *tsaraath* of Moses and the modern disease of leprosy.

Turning to the thirteenth chapter of Leviticus (King James version), we read :

Vss. 1, 2, "And the Lord spake unto Moses and Aaron saying," "When a man shall have in the skin of his flesh a rising, a scab or bright spot, and it be in the skin of his flesh like the plague of leprosy ; then he shall be brought unto Aaron the priest, or unto one of his sons, the priests." Vs. 3, "And the priest shall look on the plague in the skin of the flesh, and when the hair in the plague is turned white, and the plague in sight be deeper than the skin of his flesh, it is a plague of leprosy ; and the priest shall look on him and pronounce him unclean."¹ Vs. 45, "And the leper in whom the plague is, his clothes shall be rent and his head bare, and he shall put a covering upon his upper lip, and shall cry, 'unclean, unclean.'" Vs. 46, "All the days wherein the plague shall be in him, he shall be defiled : he is unclean : he shall dwell alone : without the camp shall his habitation be."

According to the above description, the characteristic features of leprosy were (1) the existence of bright white spots in the skin, the hair of which had also become white ; (2) the depression of the patches below the level of the skin ; (3) the existence of quick raw flesh ; (4) the spreading of the scab or scall.

Now let us turn to a description of modern leprosy. Leprosy is a chronic constitutional disease, in all probability caused by the introduction into the system of a specific germ, and affecting chiefly the skin and nervous system. There are two forms, the tubercular or nodular form, and the anæsthetic or nervous ; these two varieties are frequently associated.

The tubercular form is characterized by the occurrence of dark-brown nodules upon the skin, particularly that of the face. These may persist, disappear spontaneously, or break down and discharge. In an advanced case the face is covered with firm, livid, nodular elevations, between which are evident deep furrows

¹ Vss. 4-44 are omitted for want of space.

corresponding to the natural lines of the face. This is particularly marked upon the forehead, and gives to the patient the so-called leonine expression. The nose, lips, and ears are swollen beyond their natural size, the eyes are staring, the eyebrows and eyelashes lost, the whole producing a hideous picture of deformity. The breath is putrid and the voice hoarse.

In the anæsthetic form of leprosy the first manifestation upon the skin is frequently an outbreak of large blisters, which rupture and leave whitish scars. Or there may appear spots of a bluish-red or reddish-brown color, later becoming yellow. Occasionally white spots, much whiter than the rest of the skin, occur. There is, in the beginning, increased sensibility over these spots; later, however, the sensation becomes impaired and finally lost, so that the prick of a pin is no longer felt. The patient suffers much from terrible shooting pains along the nerves. As the disease progresses, the limbs become paralyzed, the muscles waste, and the skin becomes harsh and dry. The patient loses strength and becomes bedridden. Ulceration or gangrene may occur, involving the fingers and toes, or even the hands and feet. These members rot off, leaving discharging and mutilated stumps. The patient, weakened by the ravages of this disease, falls easy prey to intercurrent affections.

Now, comparing this with the Levitical description, we are, first of all, struck by the absence of all reference in the latter to the hideous facial deformity. If such had existed, it could not possibly have escaped observation. We must therefore take it for granted that it did not exist. Now, although improbable, it is still within the bounds of possibility that the tubercular variety of leprosy was not known in biblical times. While tubercular leprosy comprises 50 to 75 per cent. of all cases in temperate climates, it reaches as low as 20 or even 10 per cent. in tropical climates. It is, then, with anæsthetic leprosy that we will compare *tsaraath*.

It is true that bright white spots do occur in the early stages of anæsthetic leprosy; these are, however, far from constant. The spots are much more likely to be reddish, brownish, or yellowish in color. Indeed, the white spots are so infrequent that

no mention is made of them in ordinary text-books on the subject, but only in the most exhaustive treatises. And yet the Talmud laid so much stress upon the degree of whiteness that it subtly distinguished four grades of white and compared them to snow, limestone, the membrane of an egg, and the wool of a newly born lamb.

The hair of the body in leprosy becomes brittle and falls out; where it remains it may turn white. This is diagnostically of so little importance that it is barely mentioned in the whole literature of the subject.

The most characteristic sign of anæsthetic leprosy is the occurrence of loss of sensation over discolored areas. The color of the spot is a matter of little moment. There is absolutely no mention in the Levitical text of loss of feeling in the white spots. There is likewise no mention of paralysis, wasting of muscles, shooting pains, and, most remarkable of all, of the terrible mutilations.

The Levitical code prescribed that in doubtful cases the several examinations of the patient should be made at intervals of seven days, thus permitting the priest to note the progress of the disease. Leprosy is an exceedingly slow affection, particularly in the beginning, and a fortnight would show absolutely no change in the vast majority of cases.

Now, if the Mosaic description did not refer to leprosy, to what did it refer? There are several well-known diseases of the skin characterized by symptoms corresponding with the biblical description of *tsaraath*.

There is a disease known as "vitiligo," quite common in the tropics, which is characterized by bright white spots, the hairs of which lose their color and become white. The disease tends to get progressively worse, and may involve large areas of the body surface. Cases are on record of negroes affected with this disease turning entirely white. The affection is a harmless one and is only objectionable on account of the disfigurement that it occasions. While this description is fresh in our memory, let us refer to Levit. 13:12: "Then the priest shall consider and behold, if the leprosy have covered all his flesh, he shall pro-

nounce him clean, that hath the plague: it is turned white: he is clean." This verse would be quite inexplicable if this disease were regarded as leprosy, for it partakes of the nature of a paradox that the spreading of a diseased area (granted that the disease be of the gravity of leprosy) until the entire body is involved should be interpreted as rendering one clean or free from disease. This verse could be readily explained, however, under the assumption that the disease was vitiligo: the turning white of the entire surface would cause the obliteration of all spots, as there would then be uniformity of color; vitiligo having no other symptoms, the patient would, to all intents and purposes, be well or clean.

It might be contended that the *tsaraath* of Moses had undergone modifications during the lapse of centuries, and had finally terminated in our modern leprosy. This is extremely improbable, as we have a thoroughly authentic and detailed description of leprosy by Aretæus, written in the first century of the Christian era. The description corresponds exactly with modern leprosy. If leprosy has not changed in the slightest degree within the past 1800 years, it is not likely that it ever presented any marked deviations from its present picture.

Yet, it may be urged: If biblical and modern leprosy are distinct diseases, how is it that the ancients and the moderns concur in ostracizing and segregating those afflicted with this disease, and this disease alone? I am of the opinion that scriptural example is the sole factor that has led to the segregating of lepers. The sequestering of lepers was indorsed by science centuries after it had been practiced as a result of biblical mandate. Had the Bible never been written, it is probable that lepers would today be at large. While leprosy is supposed to be a contagious disease today, there is not a unanimity of sentiment on this subject, among authorities. It is probably no more contagious than pulmonary consumption, and less so than syphilis. With these diseases, however, there was no biblical example of ostracism to be followed. Despite the explicit proscriptions in Leviticus, there is much evidence to prove that the ancient Jews themselves, at least in the talmudical times, did not look

upon *tsaraath* as contagious. While Jewish lepers were obliged to live outside the camp, the same restrictions were not imposed upon non-Jews. The Mishnah says: Leprous heathens and unnaturalized proselytes were not unclean; neither were the clothing nor the houses of leprous heathens unclean. Is it probable that a law discriminating between Jew and heathen in its enforcement would be sanitary in character? Furthermore, a fiancé suspected of leprosy was not to be examined upon the day of his marriage, but only upon the seventh day thereafter. What a hazardous indiscretion, had the disease been regarded as contagious! Again, examinations of suspected lepers were never conducted at the beginning of a holiday, but were always postponed until its termination.

If a person pulled out the white hairs (which were supposed to be characteristic of leprosy) before the official examination, he was clean. It was the letter of the law that had to be enforced. Hygiene would have said: This man had the diagnostic signs of the disease upon him; but ceremonial law stepped in and said: They are no longer present.

In all cases of doubt the patient was regarded as clean. This would have been an unwise policy in dealing with a contagious disease.

The above considerations indicate that leprosy, or rather *tsaraath*, was not considered by the ancient Jews a contagious disease.

Now, if leprosy was not considered contagious, the expulsion of the lepers from the camp could not have had a sanitary significance, and if it had not, what was its import? It was purely and simply a religious ceremonial. The God of Moses was a personal God, a being who interfered in mundane affairs, who rewarded the good and punished the wicked. Leprosy was a disease inflicted by God upon those who transgressed his laws. It was a divine retribution, a visitation of providence for evil thoughts and evil deeds. It was called the "finger of God." Every leper mentioned in the Old Testament was smitten with this disease because of some transgression. Kalisch says: "Miriam uttered disrespectful words against God's chosen

servant, Moses, and therefore was she smitten with leprosy. Joab together with his family and descendants were cursed by David for having treacherously murdered his great rival, Abner. Gehazi provoked the anger of Elisha for his mean covetousness calculated to bring the name of Israel into disrepute among the heathen. King Azariah clung to reproachful worship on high places; and Uzziah was smitten with incurable leprosy for his alleged usurpation of priestly privileges in burning incense on the golden altar of the temple."

The Talmud declared that leprosy should be looked upon by the sufferer as an "altar of atonement," since it was only sent for great transgressions, such as idolatry, incest, calumny, and perjury.

It was only natural, therefore, that the people by *a posteriori* reasoning should have looked upon persons afflicted with *tsaraath* as transgressors. They had violated the laws of God, and their transgression had been great, else they would not have been so afflicted. Their presence, therefore, in the community was likely to contaminate, to morally infect others: hence were they ostracized. And so long as the signs of the disease, or, metaphorically speaking, the finger of God, remained upon them, so long were they obliged to remain without the camp. When the leper was cured, the priest was to make an atonement before the Lord, and expiatory sacrifices in the form of a sin-offering and a trespass-offering were to be made.²

In the consideration of the nature of *tsaraath*, we have thus far had recourse to internal evidence alone. Let us endeavor to gain some knowledge through collateral channels.

The earliest translation of the word *tsaraath* into any language was, of course, its rendering into the Greek in the translation of the Hebrew Bible. In the Septuagint the word *tsaraath* is rendered by the word "lepra." We are justified, therefore, in believing that the Hebrews attached the same meaning to the word *tsaraath* that the Greeks did to the word *lepra*. Now, *lepra* is derived from the word "lepros," which means rough or scaly. According to the medical writings of Aetius, Actuarius, Oriba-

² From the above paragraph it is evident that the disease known as leprosy was a curable affection. No cure is known for modern leprosy.

sus, and others, lepra was uniformly regarded as a circular superficial eruption of the skin—in other words, the psoriasis of modern times. Lepra was also regarded by the Greeks as curable, as may be observed in the following quotation from Hippocrates : “Lichen and lepra are the more easily cured, the more recent they are, and the younger the patients, and the more soft and fleshy the parts of the body in which they occur.”

There is absolutely nothing in the Greek description of lepra that suggests, even in a remote manner, the modern leprosy. The Greeks in speaking of true leprosy did not use the term lepra, but elephantiasis. It is evident that they meant by lepra an affection distinct and apart from our modern disease of leprosy.

The confusion and obscurity that have enveloped this subject for centuries have resulted from the use of different terms in successive ages to designate the same disease, and from a total change in the meaning and application of the word lepra.

With the evidence at hand, the following conclusions may be formulated : (1) that the biblical disease known as *tsaraath* comprised a number of cutaneous disorders, chief among which were vitiligo and psoriasis ; (2) that there is no evidence in the Levitical description to warrant the belief that leprosy, in the modern sense of the word, existed among the Jews at that period ; (3) that *tsaraath* was not looked upon by the Jews, at least in the talmudical times, as a contagious disease ; (4) that the segregation of lepers had its origin in the biblical example of sequestering those affected with *tsaraath* ; (5) that the word lepra or leprosy is at the present day applied to a totally different disease from that which the Greeks so designated ; and (6) that translators of the Bible ought not to use the term lepra or leprosy in translating *tsaraath*, but ought rather to Anglicize the Hebrew word itself.